Case No.: 58354US002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Named Inventor:

ROSENFLANZ, ANATOLY Z.

Application No.:

10/666615

Group Art Unit:

1755

Filed:

September 18, 2003

Examiner:

Elizabeth Bolden

Title:

METHODS OF MAKING CERAMICS COMPRISING AL₂O₃, REO, ZrO₂

AND/OR HFO₂ AND NB₂O₅ AND/OR TA₂O₅

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450

Alexandria, VA 22313-1450

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on;

Dear Sir:

Pursuant to 37 CFR §§ 1.56, 1.97, and 1.98, enclosed is a completed Form PTO-1449, citing references submitted for consideration by the Examiner. Copies of any cited foreign patents, non-patent literature, and unpublished US application documents are enclosed. Pursuant to the waiver in the Pre-OG Notice, dated July 11, 2003, copies of US patents and published US patent applications are no longer required and are not enclosed. It is respectfully requested that the Examiner initial and return the enclosed Form PTO-1449 to indicate that each reference has been considered.

If a first Office Action on the merits has been mailed prior to the mailing date of this document, please charge the fee for consideration of an Information Disclosure Statement set forth in 37 CFR § 1.17(p), and if necessary, please charge any additional fees, or credit any overpayment to Deposit Account No. 13-3723.

Respectfully submitted,

By: Gregory D. Allen, Reg. No.: 35,048

Telephone No.: (651) 736-0641

Office of Intellectual Property Counsel 3M Innovative Properties Company Facsimile No.: 651-736-3833

Substitute for form 1449A/PTO (modified)

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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First Named Inventor	Rosenflanz, Anatoly	
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Examiner Name	Elizabeth Bolden	
Attorney Case Number	58354US002	

U.S. Patent Documents						
	Cite	Document Number	Publication Date or Issue Date	Name of Patentee	Pages, Columns, Lines, Where Relevant Passages or Relevant	
Init.*	No.	Doc. Number-(Kind Code if Known)	MM-DD-YYYY	or Applicant of Cited Document	Figures Appear	
	A1	US- 3,625,717	12/07/1971	Grubba et al.		
	A2	US- 4,316,964	02/23/1982	Lange		
	A3	US- 4,757,036	07/12/1988	Kaar et al.		
	A4	US- 5,248,318 A	09/28/1993	Tamamaki et al.		
	A5	US- 5,413,974 A	05/09/1995	Yokoyama et al.		
	A6	US- 5,449,389	09/12/1995	Yoshizumi et al.		
	A7	US- 5,516,348 A	05/14/1996	Conwell et al.		
	A8	US- 5,547,479 A	08/20/1996	Conwell et al.		
	A9	US- 5,645,619	07/08/1997	Erickson et al.		
	A10	US- 5,611,829 A	03/18/1997	Monroe et al.		
	A11	US- 5,721,188	02/24/1998	Sung et al.		
	A12	US- 5,856,254	01/05/1999	Feige et al.		
	A13	US- 6,053,956 A	04/25/2000	Wood		
	A14	US- 6,277,161 B1	08/21/2001	Castro et al.		
	A15	US- 6,287,353	09/11/2001	Celikkaya		
	A16	US- 6,749,653 B2	06/15/2004	Castro et al.		

	Foreign Patent Documents						
Exam.	Cite No.	Foreign Patent Document		Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages	Translation
Init.*		Ctry. Code	Number-KindCode (If known)	MM-DD-YYYY	Applicant of Cited Document	or Relevant Figures Appear	(Check if yes)
	B1	DE	141 420	04/30/1980			X
	B2	EP	0 227 374	07/01/1987			
	В3	EP	0 236 507	09/16/1987			
	B4	EP	0 666 238 B1	08/09/1995			
	B5	EP	0 666 239 B1	08/09/1995			
	B6	FR	2 118 026	07/28/1972			Х
	B7	GB	793,503	04/16/1958			
	В8	GB	1,005,338	09/22/1965			
	B9	GB	2 116 992	10/05/1983			

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Date Considered:

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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			Fo	oreign Patent	Documents			
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		Ctry. Code	Number-KindCode (If known)	MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	(Check if yes)	
	B10	GB	2 377 438 A	01/15/2003				
	B11	JP	61099665	05/17/1986			Abstract	
	B12	JP	05-085821	04/06/1993			Х	
	B13	JP	06-171974	06/21/1994			Х	
	B14	JР	62-003041	01/09/1987			Х	
	B15	JP	2003-94414	04/03/2003			Х	
				OTHER DOC	UMENTS			
Exam. Init.*	Cite No.							
	C1	Aasland and McMillan, Nature 369, 633 (1994)						
	C2	Aguilar et al, "Melt Extraction Processing of Structural Y ₂ O ₃ -Al ₂ O ₃ Fibers", J. Eur. Ceram. Soc. 20 1091-1098 (2000)						
	C3	Gandhi, A.S. and Jarayam, V., "Pressure Consolidation of Amorphous ZrO₂-Al₂O₃ by Plastic Deformation of Powder Particles", Acta Materiala, 50 (2002), 2137-2149						
	C4	Gonzalez, Eduardo J., et al., "High Pressure Compaction and Sintering of Nano-Size γ-Al ₂ O ₃ Powder", <i>Materials and Manufacturing Processes</i> Vol. 11, No. 6, 951-967, 1996						
	C5	Jantzen, C.M., Krepski, R.P., & Herman, H., "Ultra-Rapid Quenching of Laser-Method Binary and Unary Oxides", <i>Mat. Res. Bull.</i> 15, 1313-1326 (1980)						
	C6	Khor K.A., "Novel ZrO2-Mullite Composites Produced By Plasma Spraying", Proceedings of the 15 th International Thermal Pray Conference, 25-29 May 1998, Nice, France						
	C7	Ray, C.S. and Day, D.E., "Determining the Nucleation Rate Curve for Lithium Disilicate Glass by Differential Thermal Analysis", J. Am. Ceram. Soc. 73(2) 439-442 (1990)						
	C8	Schmucker, M, et al., "Constitution of Mullite Glasses Produced by Ultra-Rapid Quenching of Plasma-Sprayed Melts", Journal of the European Ceramic Society 15 (1995) 1201-1205						
	C9	Sarjeant, P.T, & Roy, R., in <i>Reactivity of Solids</i> (ed. J. W. Mitchell, R.C., DeVries, R.W., Roberts and P. Cannon) 725-33 (John Wiley & Sons, Inc., New York 1969)						
	C10	Takamori, T., & Roy, R., "Rapid Crystallization of SiO ₂ -Al ₂ O ₃ Glasses", Journal of American Society, Vol. 56, No. 12, December 1973.						
	C11	Weber et al., "Synthesis and Optical Properties of Rare-Earth-Aluminum Oxide Glasses", J. Am. Ceram. Soc. 85(5) 1309-1311 (2002)						
,	C12		M.C., McMillan, P.F., " st. Solids. 293-295, 35		Transitions in Yttria-Alu	mina Liquids", J.		

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